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Approved For Release 2004/05/05 : CIA-RDP78B05171A000600010078-8

NPIC/TSSG/R&D-096-70

MEMORANDUM FOR: Director, National Photographic Interpretation Center

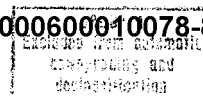
SUBJECT : Request for Approval of a Contract with [ ]  
[ ] to Design and Fabricate a Zoom 240 Pilar  
Eyepiece for [ ] from FY-1970 R&D Funds

1. This memorandum requests approval for the commitment of R&D funds for a contract. The specific request is stated in Paragraph 7.

2. The [ ] Zoom 240 Microstereoscope is the basic instrument currently utilized by photo interpreters in NPIC to view film in roll form. The Zoom 240 is easily mounted on standard 940, 1540 or equivalent light tables and is widely used in all phases of the readout of reconnaissance imagery. During these phases, comparative measurements of objects on the imagery are very useful to the photo interpreter as an aid in the identification of targets. When the imagery is of a large enough scale--and the accuracy is not critical--these measurements can be made with a 7X or 13X tube magnifier containing an engraved scale or reticle. Somewhat more critical measurements and measurements of small objects require a higher resolution viewing system. The Zoom 240 Microstereoscope, which has a useful magnification range of up to 60X, is well adapted for use in the general viewing of roll film and would be an ideal instrument for use in making comparative measurements if it were equipped with an adequate measuring capability. The Imagery Exploitation Group, NPIC, has 223 Zoom 240's at present with plans to purchase additional units in FY-71 and FY-72. IEG has specifically requested that a measuring eyepiece be developed for these instruments. It is proposed that we develop a Pilar Eyepiece for the Zoom 240 in order to provide the photo interpreter with a practical comparative measuring instrument.

3. [ ] under NPIC contract, is currently completing the development of a 7X Wide Field Pilar and Compensating Eyepiece set for the High Power Stereoviewer; however, this instrument only provides the capability of viewing film chips. The development proposed here would utilize the same basic upper eyepiece and Pilar reticle design as currently used in the Wide Field Pilar Eyepiece except that it will be optically and mechanically matched to the Zoom 240. The Zoom 240 Pilar Eyepiece, mounted in one eyepiece tube, will permit the photo interpreters to make comparative measurements at magnifications up to 42X on one image; and the compensating eyepiece, mounted in the other eyepiece tube, will maintain equal eye position so as to permit the photo interpreter to view the image stereoscopically while measuring. The proposed development will be completed five

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[redacted] from FY-1970 R&D Funds

months from date of contract. The technical risk on this project should be minimal because of the similarity between this project and the development of the Wide Field Pilar Eyepiece for the High Power Stereoviewer.

4. The contractor was solicited as a sole source for this development. [redacted] developed the Zoom 240, as well as the Wide Field Pilar Eyepiece for the [redacted] High Power Stereoviewer. Because of the absolute necessity for matching these special eyepieces to the microscope and because of the commonality between this design and the design of the Wide Field Pilar Eyepiece, [redacted] was the only company deemed qualified to bid on this project.

5. Upon successful completion of the development of the Pilar and Compensating Eyepiece set for the Zoom 240, it is anticipated that an order of 35 units will be made by IEG/NPIC at an estimated cost of [redacted] per unit set.

7. It is requested that approval be granted to negotiate a contract with the [redacted] for the Development of a Pilar and Compensating Eyepiece set for the Zoom 240 Microstereoscope at a cost not to exceed [redacted]

[redacted]  
Chief, Technical Services & Support Group, NPIC

Attachments:

1. Proposal
2. Form 2420

APPROVED:

ARTHUR C. LUNDHAL  
Director

Date

National Photographic Interpretation Center

Distribution:

- Original - NPIC/TSSG/SCAPS (After approval)  
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REMARKS:  <i>Calvin's Chrono</i>		
<b>FROM:</b>		
ROOM NO.	BUILDING	EXTENSION

FORM NO. 241  
1 FEB 55

REPLACES FORM 36-8  
WHICH MAY BE USED.

(47)